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09/893,633	06/27/2001	Richard C. Payne	GENP:101_US_	5630

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EXAMINER

GRAHAM, CLEMENT B

ART UNIT	PAPER NUMBER
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3692

MAIL DATE	DELIVERY MODE
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10/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/893,633

Applicant(s)

PAYNE, RICHARD C.

Examiner

Clement B. Graham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 02 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/2/2007 has been entered.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 6-10, 17, 20, are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Applicant's claims are directed to an algorithm. Specifically, claim 1 recites "selecting", "searching" and "presenting", however these steps are mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, for example) and abstract ideas without a practical application are found to be non-statutory subject matter. Therefore, Applicant's claims are non-statutory as they do not produce a useful, concrete and tangible result.

3. Claims 1-23, remained pending in this Application.

Claim Rejections - 35 USC § 112

4. **The following is a quotation of the second paragraph of 35 U.S.C. 112:**

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing 2 to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In particular, Claim 1 lines 4-5 states "determine at least one intermediate value", it is unclear how one would determine one intermediate value of said customized index call option ...". For further examination, the examiner interprets the limitation in light of this 112, second rejection.

In particular, Claim 17 lines 2-3 states "determine at least one intermediate value", it is unclear how one would determine one intermediate value of said customized index call option ...". For further examination, the examiner interprets the limitation in light of this 112, second rejection.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-23, are rejected under 35 U.S.C. 102(e) as being anticipated by Daughtery, III, US Patent No: 7, 024, 384.

As per claim 1, Daughtery, III discloses xx a) selecting a range from the group consisting of a range between a first lattice node with an index value no greater than an index value for said customized indexed call option and a second lattice node with an index value at least equal to said index value for said customized indexed call option, and a range between a first epoch with a time no greater than a time to expiry for said customized indexed call option and a second epoch with a time at least equal to said time to expiry; b) (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-6 lines 1-40) searching a lattice data structure based on said range from the group a search criterion to determine at least one intermediate value of said customized indexed call option; and d [[b]]c) interpolating in said at least one intermediate value of said customized indexed call option based on a set of predetermined parameters of the customized indexed call option to find said value; and, d) presenting an option for a holder of the customized indexed call option to switch between said index and said constant growth rate at predefined intervals during a term for said customized indexed call option, wherein said customized indexed call option comprises a term and an index linkage to an index and a constant growth rate. (Note abstract and see column 6 lines 31-67 and column 7 lines 1-76).

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As per claim 2, Daughtery, III discloses wherein said search criterion comprises a set of predetermined parameters of the customized indexed call option. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-66 lines 1-40).

As per claim 3, Daughtery, III discloses wherein said data structure is initialized based on a second predetermined set of parameters. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67).

As per claim 4, Daughtery, III discloses an article of manufacture comprising a customized indexed call option with a specified term and specified notional amount n operatively arranged to allow an investor to choose notional amounts n_0 and n_1 at specified intervals within the term such that $n_0 \geq 0$, $n_1 \geq 0$, and $n_0 + n_1 \leq n$, while guaranteeing nonnegative total credited interest over the term, where interest credited on the notional amount n_0 is based upon an arbitrary but specified nonzero interest rate, and interest on the notional amount n_1 is credited based on changes in a specified index. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-6 lines 1-30).

As per claim 5, Daughtery, III discloses an article of manufacture comprising a customized indexed call option with a specified term and specified notional amount n operatively arranged to allow an investor to choose notional amounts n_i at specified intervals within the term such that i is an integer such that $0 < i < 41k$, $n_i \geq 0$, and $\sum n_i \leq n$, while guaranteeing nonnegative total credited interest over the term, where interest credited on the notional amount n_0 is based upon an arbitrary but specified nonzero interest rate, and interest on the notional amount n_i , $i > 1$, is credited based on changes in specified index i , where k , the number of specified indices, is an integer greater than or equal to one. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-6 lines 1-22).

As per 6, Daughtery, III discloses a method for determining a value of a customized indexed annuity with guaranteed return amount G , comprising:
a) determining a value of a customized indexed call option; and b) determining a present value

of the guaranteed return amount G; and, c) presenting an option for a holder of the customized indexed call option to switch between said index and said constant growth rate at predefined intervals during a term for said customized indexed call option, wherein said customized indexed call option comprises a term and an index linkage to an index and a constant growth rate. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-6 lines 1-40).

As per claim 7, Daughtery, III discloses a computer-based method for determining a value of a customized indexed certificate of deposit with guaranteed return amount G, comprising: a) determining a value of a customized indexed call option; and b) determining a present value of the guaranteed return amount G; and, c) presenting an option for a holder of the customized indexed call option to switch between said index and said constant growth rate at predefined intervals during a term for said customized indexed call option, wherein said customized indexed call option comprises a term and an index linkage to an index and a constant growth rate. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-26 lines 1-40).

As per 8, Daughtery, III discloses a computer-based method for determining a value of a customized indexed life insurance policy with guaranteed return amount G, comprising: a) determining a value of a customized indexed call option; and b) determining a present value of the guaranteed return amount G; and, c) (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-26 lines 1-40) presenting an option for a holder of the customized indexed call option to switch between said index and said constant growth rate at predefined intervals during a term for said customized indexed call option, wherein said customized indexed call option comprises a term and an index linkage to an index and a constant growth rate. see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67).

As per claim 9, Daughtery, III discloses a computer-based method for determining a value of a customized indexed bond with guaranteed return amount G, comprising:

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a) determining a value of a customized indexed call option; ae, d
b) determining a present value of the guaranteed return amount G: and,
c) presenting an option for a holder of the customized indexed call option to switch between said index and said constant growth rate at predefined intervals during a term for said customized indexed call option, wherein said customized indexed call option comprises a term and an index linkage to an index and a constant growth rate see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-26 lines1-19).

As per claim 10, Daughtery, III discloses computer-based method for determining a value of a customized indexed all option, comprising:
a) generating a first sample of index paths based on a first set of predetermined parameters; b) determining an optimal choice boundary maximizing an intermediate value of said customized indexed call option for such first sample of index paths; and c) (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-6 lines1-40) determining said value of said customized indexed call option from said determined optimal choice boundary and a second sample of index paths and a second set of predetermined parameters;and, d) presenting an option for a holder of the customized indexed call option to switch between said index and said constant growth rate at predefined intervals during a term for said customized indexed call option, wherein said customized indexed call option comprises a term and an index linkage to an index and a constant growth rate. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67).

As per claim 11, Daughtery, III discloses wherein said samples of index paths are randomly generated from distributions specified by the first set of predetermined parameters. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67).

As per claim 12, Daughtery, III discloses wherein said samples of index paths are quasi-randomly generated from distributions specified by the first set of predetermined parameters. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67

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and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-26 lines 1-40).

As per claim 13, Daughtery, III discloses a wherein said first sample of index paths and said second sample of index paths are identical. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-26 lines 1-19).

As per claim 14, Daughtery, III discloses a wherein said first sample of index paths and said second sample of index paths differ. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-26 lines 1-40).

As per claim 15, Daughtery, III discloses wherein said samples of index paths are generated for one index. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-26 lines 1-40).

As per claim 16, Daughtery, III discloses wherein said samples of index paths are generated for multiple indices. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-6 lines 1-15).

As per claim 17, Daughtery, III discloses an apparatus for determining a value of a customized indexed call option:

a) means for selecting a range from the group consisting of a range between a first lattice node with an index value no greater than an index value for said customized indexed call option and a second lattice node with an index value at least equal to said index value for said customized indexed call option, and a range between a first epoch with a time no greater than a time to expiry for said customized indexed call option and a second epoch with a time at least equal to said time to expiry; (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-26 lines 1-40)

b) means for searching a lattice data structure based on said range from the group a search criterion to determine at least one intermediate value of said customized indexed call option;

and

[[b]]c_) means for interpolating in said at least one intermediate value of said customized indexed call option based on a set of predetermined parameters of the customized indexed call option to find said value; and, d) means for presenting an option for a holder of the customized indexed call option to switch between said index and said constant growth rate at predefined intervals during a term for said customized indexed call option, wherein said customized indexed call option comprises a term and an index linkage to an index and a constant growth rate. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-26 lines 1-40).

As per claim 18, Daughtery, III discloses wherein said means for searching a data structure comprises a general purpose computer specially programmed to search said data structure based on said search criterion to determine at least one intermediate value of said customized indexed call option. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-6 lines 1-17).

As per claim 19, Daughtery, III discloses wherein said means for interpolating in said at least one intermediate value of said customized indexed call option comprises a general purpose computer specially programmed to perform said interpolation. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-26 lines 1-20).

As per claim 20, Daughtery, III discloses an apparatus for determining a value of a customized indexed call option comprising:

a) means for generating a first sample of index paths based on a first set of predetermined parameters;

b) means for determining an optimal choice boundary maximizing an intermediate value of said customized indexed call option for such first sample of index paths; (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-26 lines 1-40) ae, d

c) means for determining said value of said customized indexed call option from said

determined optimal choice boundary and a second sample of index paths and a second set of predetermined parameters; and, d) means for presenting an option for a holder of the customized indexed call option to switch between said index and said constant growth rate at predefined intervals during a term for said customized indexed call option, wherein said customized indexed call option comprises a term and an index linkage to an index and a constant growth rate. . (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-26 lines 1-38).

As per claim 21, Daughtery, III discloses wherein said means for generating a first sample of index paths based on a first set of predetermined parameters comprises a general purpose computer specially programmed to generate said first sample of index paths. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-26 lines 1-40).

As per claim 2, Daughtery, III discloses wherein said means for determining an optimal choice boundary maximizing an intermediate value of said customized indexed call option for such first sample of index paths comprises a specially programmed general purpose computer. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-26 lines 1-40).

As per claim 23, Daughtery, III discloses wherein said means for determining said value of said customized indexed call option from said determined optimal choice boundary and a second sample of index paths and a second set of predetermined parameters comprises a specially programmed general purpose computer. (see column 11 lines 20-37 and column 12 lines 1-67 and column 18 lines 1-67 and column 20 lines 43-67 and column 21-23 lines 1-67 and column 24 lines 1-67 and column 25-26 lines 1-13).

Conclusion

7. Applicant's claims 1, 6-10, 17, 20, states "presenting an option for a holder of the customized indexed call option to switch between said index"

However the subject matter of a properly construed claim is defined by the terms that limit its scope. It is this subject matter that must be examined. As a general matter, the grammar

and intended meaning of terms used in a claim will dictate whether the language limits the claim scope. Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. The following are examples of language that may raise a question as to the limiting effect of the language in a claim:

- (A) statements of intended use or field of use,
- (B) "adapted to" or "adapted for" clauses,
- (C) "wherein" clauses, or
- (D) "whereby" clauses.

This list of examples is not intended to be exhaustive. See also MPEP § 2111.04.

**>USPTO personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim should not be read into the claim. E-Pass Techs., Inc. v. 3Com Corp., 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003) (claims must be interpreted "in view of the specification" without importing limitations from the specification into the claims unnecessarily). In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow.... The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed.... An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.").<

Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim. Toro Co. v. White Consolidated Industries Inc., 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999) (meaning of words used in a claim is not construed in a "lexicographic vacuum, but in the context of the specification and drawings."). Any special meaning

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assigned to a term "must be sufficiently clear in the specification that any departure from common usage would be so understood by a person of experience in the field of the invention." *Multiform Desiccants Inc. v. Medzam Ltd.*, 133 F.3d 1473, 1477, 45 USPQ2d 1429, 1432 (Fed. Cir. 1998). See also MPEP § 2111.01.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement B Graham whose telephone number is 571-272-6795. The examiner can normally be reached on 7am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 703-308-0505. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 703-305-0040 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CG

Oct 12, 2007


FRANTZY POINVIL
PRIMARY EXAMINER
Au 3692